

April 21, 2008

**COMBINED NOTICE OF
FINDING OF NO SIGNIFICANT IMPACT and
NOTICE TO PUBLIC OF REQUEST FOR RELEASE OF FUNDS
(FONSI/NOI/RROF)**

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

On or about May 21, 2008, the town of Bainville will request the Montana Department of Commerce (DOC) to release Community Development Block Grant (CDBG) funds provided under Title I of the Housing and Community Development Act of 1974, as amended (PL 93-383) for the following project:

Project	Bainville Wastewater Treatment and Collection System Upgrades
Location	Bainville, Montana
SRF Project Number	C301221-01
Total Cost	\$1,433,608

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the aforementioned project.

Project Summary

The Town of Bainville, through its 2006 Preliminary Engineering Report (PER), has identified the need to upgrade its wastewater treatment facility and collection system. Collection system improvements include cleaning and videotaping all of the sewer lines in town and replacing problem areas of pipes. It is estimated that roughly 2,400 feet of these laterals, primarily in the lower areas of town, will require replacement. Due to severe dike erosion and excessive leakage it is recommended that the existing treatment system be abandoned and the site reclaimed. A new three-cell facultative lagoon and spray irrigation system will be constructed south of the existing lagoons.

Finding of No Significant Impact

It has been determined that such request for release of funds will not constitute an action significantly affecting the quality of the human environment and accordingly the Town of Bainville, and the DEQ have decided not to prepare an Environmental Impact Statement under the National Environmental Policy Act of 1969 (PL 91-190).

The reasons for the decision not to prepare such Statement are:

The project will eliminate the illegal discharge to groundwater of inadequately treated wastewater. Sewage treatment will improve, which will reduce the potential to pollute ground and surface waters.

Environmentally sensitive characteristics such as wetlands, floodplains and threatened or endangered species are not expected to be adversely impacted as a result of the proposed project. No significant negative long-term environmental impacts were identified.

An Environmental Review Record prepared by the aforementioned Town of Bainville and an Environmental Assessment prepared by the DEQ documenting review of all project activities in respect to impacts on the environment are attached to this Finding of No Significant Impact and Request for Release of Funds. These documents are available for public scrutiny on the DEQ web site (<http://www.deq.mt.gov/ea.asp>) and also available for public examination and copying upon request between the hours of 8:00 AM and 5:00 PM at the following locations:

Dept. of Environmental Quality 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901	Town of Bainville PO Box 92 Bainville, MT 59212
---	---

No further environmental review of such project is proposed to be conducted prior to the request for release of CDBG project funds.

Release of Funds

Anticipated funding for the project is through a combination of the following: a Community Development Block Grant (CDBG), a Treasure State Endowment Program (TSEP) Grant, a Renewable Resource Grant and Loan (RRGL) from the Department of Natural Resources and Conservation, and a State Revolving Fund (SRF) Loan.

The Town of Bainville will undertake the project described above with CDBG funds provided by DOC under Title I of the Housing and Community Development Act of 1974, as amended. The Town is certifying to DOC that the Town of Bainville and chief executive officer/other certifying official, Dennis Portra, as approved by DOC, in his official capacity as Mayor and environmental certifying officer consents to accept the jurisdiction of the Federal courts if an action is brought to enforce responsibilities in relation to environmental reviews, decision-making, and action; and that these responsibilities have been satisfied. The legal effect on the certification is that upon its approval, the Town of Bainville may use the CDBG funds and DOC will have satisfied its responsibilities under the National Environmental Policy Act of 1969.

Public Comments and/ or Objections on Findings

For purposes of CDBG funding, all interested agencies, groups and persons disagreeing with the Finding of No Significant Impact are invited to submit written comments for consideration by the Town of Bainville to the Bainville town office on or before May 5, 2008. All such comments so received will be considered and the Town of Bainville will not request release of funds or take any administrative action on the project prior to the date specified in the preceding sentence.

Comments supporting or disagreeing with this decision may also be submitted to DEQ and DOC for consideration. DOC will accept an objection to its approval for State Release of Funds only if it is on one of the following bases:

1. that the certification was not in fact executed by the certifying officer or other officer of the applicant approved by DOC;

2. that the applicant's environmental review record for the project indicates omission of a required decision, finding, or step applicable to the project in the environmental review process;
3. the grant recipient has committed funds or incurred costs not authorized by 24 CFR Part 58 before approval of a release of funds by DOC; or
4. another Federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental design.

Objections to be considered by DEQ and/or DOC must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and may be addressed to one of the following agencies:

1. Department of Commerce, Community Development Division, 301 S. Park Avenue, P.O. Box 200523, Helena, Montana 59620-0523.
2. Department of Environmental Quality, Planning, Prevention & Assistance Division, 1520 East Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901.

DOC will not consider objections to the release of funds on bases other than those stated above. After evaluating the objections and comments received, the agencies will make a final decision. However, no administrative action will be taken on the project for at least 30 calendar days after publication of the Finding of No Significant Impact. For CDBG funding purposes, no objection received after May 19, 2008 will be considered by DOC.

The following documents have been utilized by the DEQ and Town of Bainville in the preparation of this Environmental Assessment and Environmental Review Record:

1. Preliminary Engineering Report for the Town of Bainville for Wastewater System Improvements, 2006, prepared by Montana Engineering & Administration, PC.
2. Uniform Application Form for Montana Public Facility Projects for the Bainville Wastewater Treatment and Collection System Upgrades, April 2006, prepared by Montana Engineering & Administration, PC.
3. Design Memorandum – 2008 Sanitary Sewer System Improvements Town of Bainville, MT, November 2007, prepared by Great West Engineering, Inc.

Sincerely,

Todd Teegarden P.E., Bureau Chief
Technical and Financial Assistance Bureau
Planning, Prevention & Assistance Division
Department of Environmental Quality

Dennis Portra, Mayor
Environmental Certifying Officer
Town of Bainville

BAINVILLE WASTEWATER TREATMENT AND COLLECTION SYSTEM UPGRADES
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: Town of Bainville
Address: PO Box 92
Bainville, MT 59212
Project Number: C301221-01

B. CONTACT PERSON

Name: Dennis Portra, Mayor
Address: PO Box 92
Bainville, MT 59212
Telephone: (406) 769-2621

C. ABSTRACT

The Town of Bainville, through its 2006 Preliminary Engineering Report (PER), has identified the need to upgrade its wastewater treatment facility and collection system. It has been determined that the collection system is subject to higher than normal flows due to the inflow and infiltration (I/I) of storm water and groundwater. The high I/I is primarily attributed to clay tile pipe that is more than 50 years old. The PER recommends videotaping all of the sewer lines in town and replacing problem areas of pipes. It is estimated that roughly 2,400 feet of these laterals, primarily in the lower areas of town, will require replacement with PVC pipe. The current wastewater treatment facility has experienced severe dike erosion and excessive leakage from the lagoon cells into groundwater. It is estimated that approximately 85% of all water entering the town's lagoons is lost through leakage to groundwater. To eliminate this illegal discharge the existing two-cell lagoon system will be replaced with a new three-cell facultative lagoon system with spray irrigation.

Federal and State grant/loan programs will fund the project. The improvements are estimated to cost approximately \$1,433,608. It is anticipated that the project will be funded through town reserves, a low interest loan (3.75%) obtained from the State Revolving Fund (SRF) loan program, and grants from the DNRC, CDBG, and TSEP.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be

adversely impacted as a result of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, growth, and sludge disposal were also assessed. No significant long-term environmental impacts were identified.

Under Montana law, (75-6-112, MCA), no person may construct, extend, or use a public sewage system until the DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, the DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ, Technical and Financial Assistance Bureau, has prepared this Environmental Assessment to satisfy the requirements of the Montana Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA).

D. COMMENT PERIOD

Thirty (30) calendar days

II. PURPOSE OF AND NEED FOR ACTION

The Bainville wastewater collection system, portions of which date back to the 1950s, consists of approximately 12,800 feet of gravity sewer main, a lift station, and 1,000 feet of force main. The most recent improvements occurred in 1998, when nearly 1,600 feet of 12" main was replaced with PVC pipe and the lift station and force main were replaced. The existing collection system contains over 11,000 feet of 8" clay tile pipe which allows significant volumes of groundwater to infiltrate through pipe joints and cracks into the collection system increasing wastewater flows. It is estimated that 20 to 25% of the existing flows are attributed to excessive inflow and infiltration (I&I). Excessive flows utilize treatment capacity and increase pump run times at the lift station, increasing operating costs and reducing the useful life of the pumps. In addition, flow reduction through the elimination of I&I will prevent the over sizing of the lagoon treatment system reducing overall project costs.

The Bainville wastewater treatment facility was installed around 1975 and consists of a two-cell facultative lagoon system. The lagoons were originally designed to discharge to Shotgun Creek; however no discharge to surface water has been reported. There is no record that the lagoons were lined and it is estimated that approximately 85% of the water entering the lagoons leaks through the bottom to groundwater. The excessive leakage of marginally treated water could lead to contamination of local groundwater resources. The lagoon dikes are so severely eroded as to be vertical and in some cases concave. Failure of the dikes is a serious concern as this would result in the discharge of inadequately treated wastewater and sludge to adjacent properties and possibly Shotgun Creek. Such a failure would present a serious health hazard to the community, downstream users, and the environment. As such, the PER recommends construction of a new three-cell facultative lagoon system with spray irrigation. These improvements will eliminate the illegal discharge to groundwater and correct the dike erosion.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

- A. Six alternatives for treatment and disposal were evaluated. For each alternative excessive I&I would be eliminated as much as possible to minimize lagoon size. As part of the project the entire collection system will be video inspected and problem areas of pipe will be replaced. It is estimated that approximately 2,400 feet of pipe will be replaced for I/I control. The treatment alternatives evaluated included:

1. No Action
2. Two-Cell Total Retention Lagoons
3. Two-Cell Facultative Lagoons with Spray Irrigation
4. Three-Cell Facultative Lagoons with Spray Irrigation
5. Two-Cell Aerated Lagoons with Storage and Spray Irrigation
6. Three-Cell Aerated Lagoons with Storage and Spray Irrigation

1. **NO ACTION** - The no-action alternative would result in continued use of the town's two-cell facultative lagoon system. These lagoons were never lined and it is estimated that approximately 85% of the water entering the lagoons leaks through the bottom to groundwater. In addition, the lagoon dikes have experienced severe erosion. Failure of the lagoon dikes is considered imminent. The loss of these dikes would be a serious environmental and health threat as sludge and inadequately treated wastewater would enter Shotgun Creek, which is located only about 300 feet away from the wastewater treatment site at its closest point.
2. **TWO-CELL TOTAL RETENTION LAGOONS** – This alternative would involve construction of a two-cell total retention lagoon system. The lagoon cells would be sized large enough to allow for complete disposal of the water by evaporation. Two-cell systems are desired in order to provide a primary cell. Under this alternative, the two existing 1.15 acre cells would be joined and lined to serve as one primary cell with an area of approximately 2.35 acres. A new 14.5 acre cell would be built south of the existing cells, sharing the southern dike.
3. **TWO-CELL FACULTATIVE LAGOONS WITH SPRAY IRRIGATION** – This alternative would involve construction of a two-cell facultative lagoon system with spray irrigation. The two existing 1.15 acre cells would be joined and lined to serve as one primary cell with an area of 2.35 acres. A new 3.6 acre secondary cell would be built east of the existing lagoons to provide storage of wastewater during the non-growing season. Approximately 12 acres of irrigated land would be required to grow either grass or alfalfa. Because disinfection is not provided, a two hundred foot buffer zone would be provided around the spray irrigation site.
4. **THREE-CELL FACULTATIVE LAGOONS WITH SPRAY IRRIGATION** – This alternative would involve construction of a three-cell facultative lagoon system with spray irrigation. The existing treatment cells would be abandoned and the site reclaimed. Two new primary cells would be

constructed on adjacent property south of the existing lagoons. These two primary cells will allow for improved settling and improved efficiency while minimizing short circuiting. A new 3.4 acre secondary cell would be built east of the new lagoons to provide storage of wastewater during the non-growing season. Approximately 12 acres of irrigated land would be required to grow either grass or alfalfa. Because disinfection is not provided, a two hundred foot buffer zone would be provided around the spray irrigation site. Based on cost comparison, environmental and social impacts, and public input, this alternative was selected to provide wastewater treatment and disposal for the Town of Bainville.

5. **TWO-CELL AERATED LAGOONS WITH STORAGE AND SPRAY IRRIGATION** – This alternative would involve construction of a two-cell aerated lagoon system with storage and spray irrigation. Mechanical aerators would be installed in the lagoon cells to provide an increased rate of oxygen transfer. A new 0.26-acre aerated lagoon cell would be built south or east of the existing lagoons, at a higher elevation. A different location is required because aerated lagoon cells typically require a depth of 10 to 12 feet. The ground water table in the vicinity of the existing lagoons is only about 5 feet below the surface. Additionally, a new 3.6 acre storage lagoon would be built at the new location. A solar mixer would be installed in this storage lagoon to provide mixing and aeration should the aeration equipment in the primary cell fail. Approximately 12 acres of irrigated land would be required to grow either grass or alfalfa. Because disinfection is not provided, a two hundred foot buffer zone would be provided around the spray irrigation site as disinfection is not provided.
6. **THREE-CELL AERATED LAGOONS WITH STORAGE AND SPRAY IRRIGATION** - This alternative would involve construction of a three-cell aerated lagoon system with storage and spray irrigation. Mechanical aerators would be installed in the lagoon cells to provide an increased rate of oxygen transfer. Two new 0.26 acre aerated primary lagoon cells would be built south or east of the existing lagoons, at a higher elevation. A different location is required because aerated lagoon cells typically require a depth of 10 to 12 feet. The ground water table in the vicinity of the existing lagoons is only about 5 feet below the surface. Additionally, a new 3.6 acre storage lagoon would be built at the new location. Approximately 12 acres of irrigated land would be required to grow either grass or alfalfa. Because disinfection is not provided, a two hundred foot buffer zone would be provided around the spray irrigation site as disinfection is not provided.

B. COST COMPARISON PRESENT WORTH ANALYSIS

The present worth analysis is a means of comparing alternatives in present day dollars and can be used to determine the most cost-effective alternative. An interest rate of 6.0% over the 20-year planning period was used in the analysis. Table 1 provides a summary of the present worth analysis of alternatives considered.

Table 1
ECONOMIC EVALUATION OF TREATMENT AND DISPOSAL ALTERNATIVES

ITEM	ALT 1 No Action	ALT 2 Two-Cell Total Retention Lagoons	ALT 3 Two-Cell Facultative Lagoons with Spray Irrigation	ALT 4 Three-Cell Facultative Lagoons with Spray Irrigation	ALT 5 Two-Cell Aerated Lagoons with Storage and Spray Irrigation	ALT 6 Three-Cell Aerated Lagoons with Storage and Spray Irrigation
Capital Costs	N/A	\$1,913,538	\$1,364,067	\$1,401,008	\$1,684,392	\$1,838,244
Annual O&M Cost	N/A	\$2,580	\$3,250	\$3,250	\$15,699	\$15,699
Present Worth of Annual O&M Costs (6%)	N/A	\$29,592	\$37,277	\$37,277	\$180,066	\$180,066
Present Worth Cost	N/A	\$1,943,130	\$1,401,344	\$1,438,285	\$1,864,458	\$2,018,310

As shown in Table 1 alternative 3 has the lowest present worth cost. However, the cost difference between alternatives 3 & 4 is less than 5% and is therefore considered to be approximately equal for planning purposes.

C. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Selection of the preferred alternative was based upon several criteria, both monetary and non-monetary. The ranking criteria and weighting factors in terms of relative importance are shown in Table 2. As shown in the ranking criteria matrix, alternatives 3 and 4 scored the highest. Alternative 3 ranked slightly higher in the present worth comparison, while alternative 4 ranked higher for expandability and operational flexibility. Based on the overall score, alternative 4, a three-cell facultative lagoon with spray irrigation, was selected to provide wastewater treatment and disposal for the Town of Bainville.

The estimated administration, design and construction cost for the recommended alternative (Alternative 4) is \$1,433,608. The town will take out a \$153,608 State Revolving Fund (SRF) loan at 3.75% interest rate for 20 years to complete the project. The project will result in user rate increases of approximately \$15.01 per month per equivalent dwelling unit (EDU). Based on examination of the past three years of operation, the cost per EDU is currently estimated at \$21.67 for wastewater. With the cost of water rising to approximately \$45.20 per month per EDU, the total combined water and sewer cost after completion of the proposed project is estimated to be \$81.87 per month per EDU. This combined rate is over 150% of the target rate for Bainville, a community which is 62% Low-to-Moderate income.

Table 2
RANKING CRITERIA FOR TREATMENT AND DISPOSAL ALTERNATIVES

Criteria	Weighting Factor	Alt 2: Two-Cell Total Retention Lagoons		Alt 3: Two-Cell Facultative Lagoons with Spray Irrigation		Alt 4: Three-Cell Facultative Lagoons with Spray Irrigation		Alt 5: Two-Cell Aerated Lagoons with Storage and Spray Irrigation		Alt 6: Three-Cell Aerated Lagoons with Storage and Spray Irrigation	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Public Health and Safety	5	7	35	10	50	10	50	7	35	7	35
Technical Feasibility	5	8	40	9	45	9	45	7	35	7	35
Environmental Impact	4	7	28	9	36	9	36	6	24	6	24
Public Opinion	5	9	45	8	40	8	40	4	20	4	20
Operations	8	10	80	6	48	8	64	4	32	6	48
Expandability	4	1	4	6	24	9	36	6	24	9	36
Present Worth	20	3.8	76	6.5	130	6.3	126	4.1	82	3.5	70
Weighted Total			308		373		397		252		268

The financial impact of this project on the system users is shown in Table 3. Based on the EPA guidance for project affordability, the proposed project will result in a monthly cost per household that is 1.7% of the monthly median household income and therefore is expected to impose a moderate economic hardship on household income.

Table 3
PROJECT AFFORDABILITY

Existing Monthly sewer rate	\$21.67
New monthly debt service and O&M increase	\$15.01
Total monthly user cost ¹	\$36.67
Monthly median household income (mMHI) ²	\$2,187.50
User rate as a percentage of mMHI	1.7 %

¹ Town of Bainville Uniform Application Form

² Based on 2000 census data

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA

The incorporated Town of Bainville is located in Roosevelt County; approximately 15 miles east of Culbertson, near the North Dakota border (See Figure 1).

The wastewater treatment facility, located southeast of the town boundaries, provides wastewater service for the entire town. This project involves decommissioning of the town's existing wastewater lagoons, and constructing a new three-cell facultative lagoon system and spray irrigation system. The town is in the process of purchasing property just south of the existing lagoon site for construction of the proposed improvements (see Figure 2). There are three existing wells located at the proposed spray irrigation site: one monitoring well, one domestic well, and one unused water well. The Montana Water Quality Act (75-5-605, MCA) prohibits the construction of a sewage lagoon less than 500 feet from an existing water well. The proposed storage lagoon would be located within 500 feet of these wells. However, the town intends to abandon all wells once the site is purchased. As such, the siting of the treatment and storage lagoons should not violate state statute. The project will take approximately four months to construct following system design. Construction is scheduled to begin in the fall of 2008.

B. FLOW PROJECTIONS

The current average flow to the wastewater treatment facility is estimated to be 28,000 gallons per day. This flow rate results in a net wastewater flow of 162 gallons per capita per day (gpcd). This high rate of flow has been attributed to excessive I/I of clay tile pipe that is more than 50 years old, two roof drains from the school draining directly into the sanitary sewer, high backwash rates at the town's current water treatment plant, and un-metered water usage. The roof drains have since been disconnected from the sanitary sewer and the town has begun reading water meters and will adjust the billing to reflect actual water usage. In addition, the town will soon be abandoning its water treatment plant and hooking on to the Dry Prairie water system. These improvements alone are expected to drop the per capita wastewater flow to 150 gpcd.

The town plans to conduct some I/I improvement as part of this project. The collection system will be video inspected and problem areas of pipe will be replaced. It is estimated that approximately 2,400 feet of pipe will be replaced for I/I control. The projected wastewater flows after I/I improvements is outlined in Table 4. The net wastewater flow is expected to be 125 gpcd after these I/I improvements are made.

Based on past census data, Bainville has experienced a slight decrease in population for the past two decades. However a boom in oil exploration in the nearby Williston Basin has reversed this trend. For planning purposes annual growth rate in the town is estimated to be 6% through 2009, which then tapers off

to 3% for 5 years and then 1% for the remainder of the planning period.

Table 4
PROJECTED POPULATION AND WASTEATER FLOWS AFTER I/I
IMPROVEMENTS

Year	Population ¹	Average Daily Flow	Peak Daily Flow	Peak Hourly Flow
		(gal/day)	(gal/day)	(gal/min)
2006	177	22,125	44,250	61
2014	244	30,500	61,000	85
2024	269	33,625	67,250	94
2029	283	35,375	70,750	100

¹ Includes variable growth rate plus the equivalent student population.

C. NATURAL FEATURES

The Town of Bainville, and the area surrounding it, is primarily plains. Within the town, land is predominantly residential, while land immediately outside the boundaries is agricultural. Land topography slopes up to the west and south of town. Slopes within the developed town are gradual and consistent, providing for ease of gravity collection. However, prior to the lagoons, a lift station is required.

The soils in and around Bainville are primarily silt loams. Bainville and the surrounding area all drain to Shotgun Creek, which drains to the Missouri River. The Missouri River drainage from the Milk River to the North Dakota border is classified as a C-3 water body. Waters classified as C-3 are to be maintained suitable for bathing, swimming and recreation, and growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl and furbearers. The quality of these waters is naturally marginal for drinking, culinary and food processing purposes, agriculture and industrial water supply.

Groundwater in the area appears to flow north, consistent with the land relief towards Shotgun Creek. The town currently has two groundwater wells located approximately 1 mile northwest of the existing lagoons. The water from these wells is very high in iron and manganese. There are also two wells in the area of the town's existing lagoons and proposed spray irrigation site. The static water level in these wells is much lower than those found for areas around the town. The wells have a static water level of 75 feet and 50 ft. Elevations of the well locations are 10 to 30 feet above the existing lagoons.

D. MAPS

The Town of Bainville is located in Roosevelt County; approximately 15 miles east of Culbertson, near the North Dakota border (See Figure 1). This project involves abandonment and reclamation of the town's existing wastewater lagoons, as well as the construction of a new three-cell facultative lagoon system and spray irrigation site. The town is in the process of purchasing property just south of the existing lagoon site for construction of the proposed improvements (see Figure 2). Figure 3 shows the town limits and planning area.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use – Land use in the area is primarily agricultural and will not change as a result of this project. This project will result in an additional 12 acres of land in the area to be irrigated enabling a grass/hay crop to be grown. The new lagoons will occupy approximately 8 acres of non-agricultural land.
2. Floodplains and Wetlands – Although floodplain maps are not available for this area, the proposed project area is reported to be outside of the floodplain. The state road provides a barrier to Shotgun Creek. The project area does not include any work around known, mapped wetlands.
3. Cultural Resources – No impacts to cultural resources are anticipated. The State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been no previously recorded sites within the designated search locales. SHPO stated that there was a low likelihood that cultural properties would be impacted and as such, felt a cultural resource inventory is unwarranted at this time.
4. Fish and Wildlife – Animal life will not be significantly affected by the proposed project. The project will not affect any wildlife habitats, nor will any known endangered species be affected. The proposed project has water quality benefits that will protect and reduce the risk of harm to fisheries and other animals. In addition, the irrigation system will improve the growth of vegetation enhancing habitat for animals and birds.
5. Water Quality - Water quality in the area is expected to improve due to the proposed project. The existing lagoons are not lined and it is estimated that approximately 85% of the water entering the lagoons leaks through the bottom to groundwater. Eliminating this discharge will result in the reduction of pathogen and nutrient loadings to groundwater. The irrigation plan will require that the treated wastewater be applied at agronomic rates so that nitrogen does not impact the groundwater.
6. Air Quality - Short-term negative impacts on air quality are expected to occur during construction from heavy equipment in the form of dust and exhaust fumes. Proper construction practices will minimize this problem. Project specifications will require dust control.
7. Public Health - Public health will not be negatively affected by the proposed project. The project will eliminate the illegal discharge to groundwater of inadequately treated wastewater. Sewage treatment will improve, which will reduce the potential to pollute ground and surface waters. In addition new lagoon embankments will eliminate the threat of embankment failure that could release partially treated wastewater,

- sludge and pathogens to the environment.
8. Energy – No appreciable change in energy consumption is anticipated. There will be some power requirements for the irrigation equipment; however, this usage is considered minimal.
 9. Noise - Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. No significant long-term impacts from noise will occur.
 10. Sludge Disposal - As part of this project, sludge will be removed from the existing lagoons. The sludge will be disposed of in accordance with EPA's 503 regulations.
 11. Growth - Improvements of the wastewater collection and treatment system may result in minor secondary impacts that are associated with the growth of the community. These can include impacts to: housing and commercial development, agricultural lands, solid waste, transportation and utilities. However, given the small increase projected for the town's population, no significant impacts are anticipated.
 12. Cumulative Effects - No significant adverse impacts are anticipated.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction related impacts (i.e., noise, dust, traffic disruption, etc.) will occur, but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

VI. PUBLIC PARTICIPATION

Public participation for this project included a press release and hearing in October of 2005. An additional hearing to discuss the findings of the PER was held on April 9, 2006. At the public hearing, the need for the project and recommended alternatives were discussed. Cost estimates for the project and impacts on rates were presented. The public, as well as council members, voiced support for the project.

VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

No additional permits will be required from the State Revolving Fund (SRF) section of the DEQ for this project after the review of the submitted plans and specifications. However, coverage under the storm water general discharge permit is required from the DEQ Water Protection Bureau prior to the beginning of construction.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

☐ EIS

☐ More Detailed EA

☒ No Further Analysis

Rationale for Recommendation: Through this EA, the DEQ has verified that none of the adverse impacts of the proposed Bainville Wastewater Treatment and Collection System Upgrades project are significant. Therefore, an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609, and 17.4.610. The EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant.

IX. REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are considered to be part of the project file:

1. Preliminary Engineering Report for the Town of Bainville for Wastewater System Improvements, 2006, prepared by Montana Engineering & Administration, PC.
2. Uniform Application Form for Montana Public Facility Projects for the Bainville Wastewater Treatment and Collection System Upgrades, April 2006 prepared by Montana Engineering & Administration, PC.
3. Design Memorandum – 2008 Sanitary Sewer System Improvements Town of Bainville, MT, November 2007 prepared by Great West Engineering, Inc.

X. AGENCIES CONSULTED

The following agencies have been contacted in regard to the proposed construction of this project:

1. The U.S. Fish and Wildlife Service reviewed the proposed project and determined that no federally listed species or designated critical habitat occurs within the project area.
2. The Montana Department of Natural Resources and Conservation (DNRC) was contacted on 3/21/06 and again on 11/15/06 regarding floodplain impacts due to the proposed project. No comments were received from the DNRC.

The Roosevelt Disaster and Emergency Services (DES) indicated that incorporated communities maintain their own floodplain management system but that Bainville does not participate in the National flood Insurance Program (NFIP) and, therefore, no floodplain restrictions apply. The DES did indicate, however, that Shotgun Creek flows nearby the proposed site and could possibly inundate the site during high water.

3. The Montana Historical Society's State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been no

previously recorded sites within the designated search locales. SHPO stated that there was a low likelihood that cultural properties would be impacted and, as such, felt a cultural resource inventory is unwarranted at this time.

4. The U.S. Department of the Army Corps of Engineers (USCOE) reviewed the proposed project. The USCOE is responsible for administering Section 404 of the Clean Water Act, which regulates the excavation or placement of dredged or fill material below the ordinary high water mark of our nation's rivers, streams, lakes or in wetlands. The USCOE was unable to determine if any jurisdictional waters would be impacted by this project. As such, the USCOE asked that a permit application be submitted if the final design requires the placement of fill material in any jurisdictional waters.
5. The Montana Department of Fish, Wildlife and Parks was contacted on 3/21/06, 11/15/06 and again on 12/27/07 regarding any impacts to threatened or endangered species due to the proposed project. To date, no comments have been received.
6. The Montana Department of Environmental Quality reviewed the proposed project and had comments concerning the required water quality permits for construction related activities. Montana Pollutant Discharge Elimination System (MPDES) storm water and construction dewatering permits may be necessary for the project. In addition, a 318 authorization (short term water quality standard for turbidity) and a 401 certification may also be required. If a discharge to state waters is anticipated, a MPDES discharge permit or a Montana Ground Water Pollution Control System permit must be obtained prior to construction.

EA Prepared by:

Mike Abrahamson, P.E.

Date

EA Reviewed by:

Paul LaVigne, P.E.

Date